

Yorktown Heights, NY 10598

# United States Patent and Trademark Office

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO
09/690,249	10/17/2000	Sergey Ignatchenko	CA919990041US1	3359
75	90 11/24/2004		EXAMINER	
Louis P Herzb	erg		UNGAR, D	ANIEL M
Intellectual Prop			<u>-                                    </u>	
IBM Corporation			ART UNIT	PAPER NUMBER
P O Box 218			2132	

DATE MAILED: 11/24/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

		Application No	App	licant(s)				
Office Action Summary		09/690,249	IGN/	IGNATCHENKO ET AL.				
		Examiner	Art l	Jnit				
		Daniel M. Unga						
Period fo	The MAILING DATE of this communica or Reply	ation appears on the cov	er sheet with the corres	pondence address				
THE I - Exter after - If the - If NO - Failu Any	ORTENED STATUTORY PERIOD FOR MAILING DATE OF THIS COMMUNICATION OF THIS COMMUNICATION OF THIS COMMUNICATION OF THE PROVISIONS OF SIX (6) MONTHS from the mailing date of this communication of the provisions of period for reply specified above is less than thirty (30) of period for reply is specified above, the maximum statuting to reply within the set or extended period for reply will reply received by the Office later than three months after the patent term adjustment. See 37 CFR 1.704(b).	ATION. 37 CFR 1.136(a). In no event, horication. days, a reply within the statutory mory period will apply and will expir. I, by statute, cause the application	wever, may a reply be timely filed ninimum of thirty (30) days will be e SIX (6) MONTHS from the mail to become ABANDONED (35 U	considered timely. ling date of this communication. J.S.C. § 133).				
Status								
1)	Responsive to communication(s) filed on							
2a) <u></u> ☐	This action is <b>FINAL</b> . 2b	)⊠ This action is non-fi	nal.					
3)□	Since this application is in condition for allowance except for formal matters, prosecution as to the merits is							
	closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213.							
Dispositi	on of Claims		•					
4)🖂	☑ Claim(s) <u>1-29</u> is/are pending in the application.							
	4a) Of the above claim(s) is/are withdrawn from consideration.							
•	Claim(s) is/are allowed.							
	Claim(s) <u>1-29</u> is/are rejected.							
	Claim(s) is/are objected to.							
8)[	Claim(s) are subject to restriction	on and/or election requir	ement.					
Applicati	on Papers							
9)⊠ The specification is objected to by the Examiner.								
10)⊠	10)⊠ The drawing(s) filed on <u>17 October 2000</u> is/are: a) accepted or b) objected to by the Examiner.							
	Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).							
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).								
11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.								
Priority (	ınder 35 U.S.C. § 119							
-	Acknowledgment is made of a claim for ☐ All b) ☐ Some * c) ☐ None of:		• • • • • • • • • • • • • • • • • • • •	ır (f).				
	<ol> <li>Certified copies of the priority documents have been received.</li> <li>Certified copies of the priority documents have been received in Application No</li> </ol>							
	Copies of the certified copies of the priority documents have been received in Application No      Copies of the certified copies of the priority documents have been received in this National Stage							
application from the International Bureau (PCT Rule 17.2(a)).								
* See the attached detailed Office action for a list of the certified copies not received.								
Attachmen	•		<b>7</b>					
	e of References Cited (PTO-892) e of Draftsperson's Patent Drawing Review (PTC		Interview Summary (PTO-4 Paper No(s)/Mail Date					
3) Inform	mation Disclosure Statement(s) (PTO-1449 or PT r No(s)/Mail Date		Notice of Informal Patent A Other:					

Art Unit: 2132

1. Claims 1-29 have been examined.

# **PRIORITY**

2. Acknowledgment is made of applicant's claim for foreign priority under 35 U.S.C. 119(a)-(d). The certified copy has been filed in foreign application CA2287871, filed on November 1, 1999.

### **SPECIFICATION**

- 3. The specification is objected to due to a number of informalities:
  - a. Page 3, line 9: "where" should be lowercase.
  - b. Page 4, line 5: sentence is missing period.
  - c. In a number of places (Abstract; page 4, lines 7 and 9; page 6, lines 14, 23, and 25), the specification recites "an user" and "an unique identifier." Besides being inconsistent with other parts of the specification where "a user" and "a unique identifier" is used, it is improper to use the article "an" before a word that phonetically sounds like it begins with a consonant, even though orthographically it starts with a vowel. Thus, "user" is preceded by "a". Note that the words "hour" and "honorable" are preceded by "an" due to the reciprocal principle.
  - d. Page 5, line 5: improper space before comma.
  - e. "NB", the first word on page 10, is curious.
  - f. Page 13, line 30 and page 15, line 10: ostensibly, "document" is misspelled, likely due to bad OCR.

Appropriate correction is required.

## **DRAWINGS**

- 4. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they do not include the following reference sign(s) mentioned in the description: Items 36, 40 of Figure 4.
- 5. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they include the following reference character(s) not mentioned in the description: Item 26, 33 of Figure 4; Item 79 of Figure 6a.

Art Unit: 2132

6. The drawings are objected to under 37 CFR 1.83(a) because they are incomplete and/or defective for the following reasons:

- a. A number of arrows and decision identifiers (i.e. "Yes" and "No") are absent from the drawings. The examiner will attempt to point these out in the following objections, but the drawings in general are replete with errors.
- b. Item 46 of Figure 5 is apparently in the wrong place. It doesn't point to anything meaningful.
- c. There is no "Yes" arrow coming from Item 24 of Figure 4.
- d. There is no arrow connecting Items 34 and 38 of Figure 4.
- e. There is no "Yes" arrow coming from Item 50 of Figure 5.
- f. Figure 6a: A box below Item 62 is lacking an item number and arrows. This figure is incomplete.
- g. "Principal" is misspelled in Item 62 of Figure 6a.
- h. "Its" is misspelled in Item 74 of Figure 6a.
- i. Figure 6b clearly does not originate from Item 72 of Figure 6a as demonstrated by the description.
- j. Figure 7: Usually, "Yes" and "No" stem from diamonds, not rectangles. This flowchart is incomplete.
- k. Figure 8: A box stemming from Item 106 is lacking an item number.

## CLAIM REJECTIONS - 35 U.S.C. 112

- 7. Claims 4-8, 11, 15-19 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Claims that are not explicitly treated in the following objections are objected to due to their dependency on other, rejected claims.
- 8. Claim 4 recites "said storage means", for which there is insufficient antecedent basis. It is noted that Claim 1 does recite "storing data in [...] a storage system".

Art Unit: 2132

9. Claim 6 recites "said storage", for which there is insufficient antecedent basis. It is noted that there would be antecedent basis for a storage system, storage control means, and storage means (although as it stands, storage means itself lacks antecedent basis).

- 10. Claim 7 limits Claim 5 by reciting, "said access control means". There is insufficient antecedent basis for this limitation in the claim. It is noted that Claim 6 does recite access control means.
- 11. Claim 11 recites "said database" and "said db server", for which there is insufficient antecedent basis.
- 12. Claim 15 recites "said storage means", for which there is insufficient antecedent basis. It is noted that Claim 12 does recite "storing data in [...] a storage system".
- 13. Claim 18 recites "said secured data", for which there is insufficient antecedent basis.

#### *REJECTIONS – 35 U.S.C. 102*

14. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

15. Claims 1, 4, 6, 7, 8, 9, 10, 12, 15, 17, 18, 19, 20, 21, 24, 25, 26, 27, 28, and 29 are rejected under 35 U.S.C. 102(b) as being anticipated by Dan, et al., inventor for Patent Pumber 5,825,877 (assigned to International Business Machines). These rejections are made for the claims as best understood, in view of any rejections made due to indefiniteness (35 U.S.C. 112).

Dan, et al. disclose:

a trusted server, available to one or more users, to manage documents (see column 2, lines 20-25; Abstract; Figure 1). The

protected documents,

access control information, and

Art Unit: 2132

all associated identifiers and

signatures

are stored in and accessible from data structures in a database, all within a communications system (see column 1, lines 49-59; Figure 2). This meets the limitations of a database server, a storage system, and storage control means for the data.

certificates for the data and access control information, generated by a cryptographic combination of the data to be protected and a key (see column 2, lines 30-37; column 2, line 55 – column 3, line 16). This meets the limitations of a unique identifier and data signatures for the purpose of authentication. Note further that Dan, et al. state that "if desired there could be a single certificate for both the code and its access list" (column 2, lines 36-7).

16. Specifically regarding claims 7 and 8, Dan, et al. disclose the determination of:

whether the data matches its signature,

whether the access control information matches its signature,

whether the two signatures correspond to the certifying authority's private key, meeting the limitation of determining whether the unique identifier of the access control information corresponds with the unique identifier of the data, and

whether the access control permits or denies the user access (see column 3, lines 3-16; Figure 2; Figure 7), and

a graphical user interface to provide the user with the result of the determination if access is allowed or disallowed (see column 2, lines 60-64).

#### REJECTIONS – 35 U.S.C. 103

17. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

18. Claims 2, 3, 5, 13, 14, 16, and 23 are rejected as being unpatentable over Dan, et al. as outlined above, in view of Preston, et al., Patent Number 5,052,040 ("Multiple user stored data cryptographic labeling system and method").

Dan, et al. teach the cryptographic signature of the document and access control information for authentication, but they fail to teach the encryption of the document and access control information themselves. However, Preston teaches the encryption of the data (see column 3, lines 52-61), and the access control information (see column 6, lines 20-36). It would have been obvious to one of ordinary skill in the art at the time of the invention to also encrypt the actual data and access control information of Dan, et al., to prevent unauthorized access of them, the motivation disclosed by Preston, et al.

19. Claims 11 and 22 are rejected as being unpatentable over Dan, et al. as outlined above, in view of Dujari, Patent Number 6,272,593.

Dan, et al. do not teach that a random identifier be requested to be used to uniquely identify the data to be stored. Dujari teaches the generation of random names (identifiers) prior to the storage of the data (column 5, lines 25-30). Only if that identifier is unique is that data stored with that identity; otherwise, an error results and the opportunity is given to generate another random identifier (column 6, lines 48-54). Thus, if one is motivated to store a document with an identifier that needs to be unique but not necessarily meaningful, as is taught by Dujari, it would have been obvious to one skilled in the art at the time of the invention to request to reserve a unique random identifier for a document to be stored, and to store it only if that identifier is verified to be unique.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Daniel M. Ungar whose telephone number is 571.272.7960. The examiner can normally be reached on 8:30 - 6:00 Monday - Thursday, Alt. Fridays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Gilberto Barron can be reached on 571.272.3799. The fax phone number for the organization where this application or proceeding is assigned is 703.872.9306.

Application/Control Number: 09/690,249

Art Unit: 2132

Page 7

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Art Unit 2132

Daniel M. Ungar

GILBERTO BARRON
SUPERVISORY PATENT EXAMINER

TECHNOLOGY CENTER 2100